CLAIMS

What is claimed is:

1. A method for routing message to a short message service center (SMSC) in a network including a plurality of SMSCs, the method comprising:

(a) receiving a message having a signaling connection control part and a mobile application part, the mobile application part having a mobile identification number;

(b) determining an entity type for the message based on the signaling connection control part;

(c) in response to determining that the entity type indicates that the message is destined for an SMSC, performing a lookup in an address translation database using the mobile identification number from the mobile application part of the message to locate an address for one of the SMSCs in the network; and

(d) .in response to locating the address, routing the message based on the address.

2. The method of claim 1 wherein performing a lookup in an address translation database includes performing a lookup in a database indexed by single mobile identification numbers.

3. The method of claim 1 wherein performing a lookup in an address translation database includes performing a lookup in a database indexed by ranges of mobile identification numbers.

4. The method of claim 1 wherein performing a lookup in an address translation database includes performing a lookup in a first database indexed by single of mobile identification numbers using the MIN extracted from the MAP portion of the message and in response to failing to locate the address in the first database, performing a lookup in a second database using an entity address extracted from the signaling connection control part of the message.

5. The method of claim 4 wherein the entity address extracted from the signaling connection control part of the message corresponds to an entity address programmed into a mobile handset.

6. The method of claim 1 wherein receiving a message includes receiving a short message service message from a mobile switching center.

7. The method of claim 6 wherein receiving a short message service message includes receiving a short message service message at a signal transfer point or signaling gateway.

8. The method of claim 1 wherein routing the message based on the address includes routing the message to an interworking mobile switching center (IWMSC) associated with the one SMSC.

9. A flexible routing node comprising:

(a) a first communication module for receiving signaling messages, determining whether the messages require signaling connection control part (SCCP) processing, and, in response to determining that the messages require SCCP processing, internally routing the messages; and

(b) a processing module for receiving the signaling messages that require SCCP processing, extracting mobile identification numbers from mobile application part portions of the messages, and performing address translations for the messages based on the mobile identification numbers.

10. The flexible routing node of claim 9 wherein the processing module includes an entity type table for determining an entity type for the signaling messages that require SCCP processing.

11. The flexible routing node of claim 10 wherein the entity type table includes entries for mapping subsystem number values to entity type identifiers.

12. The flexible routing node of claim 11 wherein the entity type table includes a first entry for mapping a subsystem number value to an SMSC entity type.

13. The flexible routing node of claim 12 wherein the first entry maps the subsystem number value of 8 to an SMSC entity type.

14. The flexible routing node of claim 12 wherein the processing module is adapted to perform the address translations based on the mobile identification numbers extracted from the MAP portions of the messages for messages having an entity type of SMSC.